



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/825,353

04/04/2001

Erik Dahlman

2380-307

1424

7590

11/24/2004

NIXON & VANDERHYE P.C.

8th Floor

1100 North Glebe Road

Arlington, VA 22201

EXAMINER

NGUYEN, HANH N

ART UNIT

PAPER NUMBER

2662

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/825,353

Applicant(s)

DAHLMAN ET AL.

Examiner

Hanh Nguyen

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Application filed on 04/04/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/27/03 &amp; 9/17/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Oath/Declaration***

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

The declaration filed on 7/11/01 is defective because Applicant failed to initiate alterations.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-10, 12, 14-22, 24-28 and 30-35 are rejected under 35 USC 102(e) as being anticipated by O'Byrne (Pat. 6,243,584 B1).

In claims 1, 24, 28, 30, O'Byrne discloses a CDMA communication system (Fig.2A, CDMA 2110) having an associated first frequency reuse (Fig.2A, ref. 2160, 2150, 2170) for the first channel, and an associated second frequency reuse for a second channel (Fig.2B, ref. 2120)

wherein one of the channels is a code division multiple access (CDMA) channel. See col.4, lines 15-20 & lines 40-50 & col.5, lines 1-5 & lines 65-67).

In claims 12 and 27, O'Byrne discloses a main frame computer system (a control node comprising a memory and a controller) operated on a CDMA network. The computer system is configured to update the existing CDMA network. See col.3, lines 60 to col.4, line 5) (storing and associating frequency reuse values for different channels wherein one of the first and second channels is a code division multiple access (CDMA) channel).

In claims 2 and 15, O'Byrne discloses the first channel includes a first type of Channel (shared channel/downlink channel, see col.4, lines 15-22) and the second channel includes a second type of channel (see col.4, lines 40-50).

In claims 3, 16, 25 and 31, O'Byrne discloses the first type of channel is a shared channel (shared channel/downlink channel, see col.4, lines 15-22) and the second type of channel is a dedicated channel (see col.4, lines 40-50).

In claims 4 and 32, O'Byrne discloses the shared channel is a downlink channel (see col.4, lines 15-20) and the second type of channel includes a downlink dedicated channel associated with the downlink shared channel.

In claims 26 and 33, the limitation of this claim has been addressed in claim 1.

In claim 5, O'Byrne discloses the second channel type also includes an uplink dedicated channel, associated with the downlink shared channel (See col.5, lines 7-15).

In claims 6, 7, 17 and 22, O'Byrne discloses the first frequency reuse is greater than the second frequency reuse (Fig.4, F1, F2) and the second frequency reuse (Fig.4, F1, F1) is equal to one (see Fig.4, col.1-5).

In claims 8, 18, 20 and 34, O'Byrne discloses the first type of channel is a downlink channel (see col.4, lines 15-20) and the second type of channel is an uplink channel (col.5, lines 7-12).

In claim 9, 19, 21 and 35, O'Byrne discloses the first type of channel includes multiple downlink channels(see col.4, lines 15-20) and the second type of channel includes one uplink channel associated with the multiple downlink channels (col.5, lines 7-12).

In claims 10 and 14, O'Byrne discloses the first type of channel is a channel not configured to use soft handover, and the second type of channel is a channel that is configured to use soft handover (See col.5, lines 20-25).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 USC 103(a) as being unpatentable over O'Byrne (Pat. 6,243,584 B1) in view of H'mimy et al. (Pat. 6,512,752 B1).

In claim 13, O'Byrne does not disclose the control node is a radio network controller coupled to one or more base stations. H'mimy et al. discloses a radio network controller (Fig.1, BSC 28) coupled to one or more base stations (Fig.1, BTSs 26). See col.3, lines 30-45). Therefore, it would have been obvious to one ordinary skill in the art to use the mainframe computer of O'Byrne as a radio network controller coupled to base stations in a

CDMA network to assign different frequency reuse values to cells to increase cell capacity. The the purpose is to minimize interferences caused by similar frequency values cells.

Claims 11, 23 and 29 are rejected under 35 USC 103(a) as being unpatentable over O'Byrne (Pat. 6,243,584 B1) in view of Mujtaba (Pat. 6,813,254 B1).

In claims 11, 23, 29, O'Byrne does not disclose the other of the first and second channels is an orthogonal frequency division multiplexing (OFDM) channel. Mujtaba discloses, in Fig.11, downlink channels 102 use OFDM technique ( first channel is an OFDM channel). See col.6, lines 30-45. Therefore, it would have been obvious to one ordinary skill in the art to use OFDM technique in uplink or down link channels in O'Byrne for the purpose of separating users with different slots and codes.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Soliman (Pat.6356531 B1) discloses Monitoring of CDMA Load and Frequency Reuse Based on Reverse Link Signal-To-Noise Ratio.

Natali et al. (Pat. 6,317,412 B1) discloses Increased Capacity in an OCDMA System for Frequency Isolation.

Persson (Pat. 6,556,829 B1) discloses Mobile Communication System.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8AM to 5PM. The examiner can also be reached on alternate

Art Unit: 2662

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen  
Primary Examiner

A handwritten signature in black ink, appearing to read 'HNguyen', with a stylized, cursive script.

November 19, 2004